

**Lehigh Southwest Cement Company**

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April 15, 2010

Dyan C. Whyte  
Assistant Executive Officer  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

**Subject:** Re: NOTICE OF VIOLATION and required corrective action for failure to protect stormwater at industrial facility

**Facility:** Lehigh Southwest Cement Co. (formerly Hanson Permanente Cement)  
Industrial facility, located at 24001 Stevens Creek Boulevard, Cupertino,  
Santa Clara County  
WDID No. 2 4310062677

Dear Ms. Whyte:

This is Lehigh Southwest Cement Company's response to the above-referenced notice of violation and your letter dated March 26, 2010. The text of the concerns raised in the NOV is set forth herein, followed by Lehigh's response.

At the outset, we note that Lehigh Southwest Cement Company – Permanente Plant's SWPPP was updated (SWPPP 15) and was submitted to the Board on March 3, 2010. The revised version addressed some of the inspectors initial concerns noted during the February 10, 2010 inspection. Further revisions (Revised SWPPP 15) are being made consistent with the response herein and will be provided to the Regional Board by May 15, 2010.

**1. INSPECTION FINDINGS:** A copy of the SWPPP, last revised in June 2009 and denoted SWPPP 14, was retained onsite as required by Section A.10.a of the Permit. The SWPPP was reviewed during the inspection and found to be inadequate for the following reason:

The Site Map did not clearly identify all structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on, as required by Section A.4.b of the Permit. SWPPP 14 states "Figure 3 shows the main drainage areas, flow patterns within drainage areas, settlement ponds, and discharge locations into the Permanente Creek within the Lehigh Southwest Cement Company property boundary."

However, none of the SWPPP 14 Site Maps (denoted Figures 1—6 of SWPPP 14) include the structural control measures or drainage collection and conveyance system associated with the reuse of onsite storm water runoff and non-storm water sources in the eastern portion of the site. During the inspection, Mr. Scott Renfrew (hereafter, the Environmental Manager) explained the current conditions of the eastern portion to include the following:

- A closed system of water recycling allows water to be reused in the industrial process (e.g., gas conditioning tower, washing aggregate, dust suppression, etc.).
- Drainage inlets and overland flow in the eastern portion of the site are directed to a lift station referred to as "Pearl Harbor" (see attached Photographs 2 and 3), which pumps

the water to a man-made pond referred to as the "Lake" (see attached Photographs 4 and 5), which gravity feeds a de-commissioned thickener unit that is used as a holding tank for recycled water (see attached Photograph 6).

- The recycled water system is operated to use water in the dry season, draw down the level of the "Lake," and create capacity for winter storms.

Because none of the SWPPP 14 Site Maps (denoted Figures 1—6) include the structural control measures associated with the recycled water system, the Facility is in violation. To come into compliance, the Facility must update the Site Map to clearly identify all structural control measures that affect storm water discharges.

**VIOLATION: Inadequate site map**

**REQUIRED CORRECTIVE ACTION:** By April 15, 2010, update site maps too clearly identify all structural control measures, authorized non-storm water discharges, and run-on. Provide a paper and electronic copy to the Regional Water Board.

**Lehigh Response:** Lehigh has utilized and submitted to the Board very similar maps to show the details and locations of the SWPPP infrastructure, including details of the terraced road ways banks to divert storm event contact water of one of the various sediment retention ponds, location and identification of the various retention ponds, sampling locations and Best Management Practices (BMPs) that affect storm water discharges.

From the 2007/8 Annual Storm Water Report, which the Inspector had already received prior to his inspection, the List of Figures (Maps) is as shown below:

**List of Figures**

Figure 1 Site Location Map

Figure 2 Site Layout Map

Figure 3 Storm Water Flow and Drainage Areas

Figure 4 Storm Water Sampling Locations

Figure 5 Best Management Practices Implemented for 2006/2007 Season

Figure 6 Proposed Best Management Practices 2007/2008 Season

Figure 7 Ongoing Best Management Practices

Each map details the specifics as titled above. It should be noted that the facility's SWPPP details an almost 3,500 acre site with operations / control measures implemented over 1/3 of the property. As reflected above, the structural stormwater control measures are delineated on these Figures. As to the recycled water system described in the NOV, that system collects water for reuse and it is a closed system subject to a separate Order by the Regional Board Order 94-038. As such, no stormwater discharges are associated with or affected by that system; it is not regarded as part of the facility's stormwater collection and discharge system. Therefore, it was not necessary (or appropriate) to show this facility on the Site layout to comply with Section A.4.b of the General Permit. Accordingly, the SWPPP and the Site Maps comply with applicable requirements. Lehigh considered adding the Lower Lift Station to the Site Maps as an accommodation to the inspector's recommendations, but we concluded that it is best to avoid confusion by not adding facilities to the Site Maps that are not associated with and do not affect storm water discharges.

**2. INSPECTION FINDINGS:** The Permittee's Monitoring Program was not in accordance with the sampling location requirements specified by Section B.7 of the Permit. Specifically, the sample collection location denoted SL-21-PD at the outlet of Pond 17 was not representative of the quality and quantity of the facility's storm water discharges from Pond 17.

Rather than collecting the sample at the outfall pipe to Permanente Creek (see attached Photograph 16), Figure 4 of SWPPP 14, Storm water Sampling Locations, indicates that the SL-21-PD sample is collected at the outlet of Pond 17 (see attached Photograph 12). Due to the existence of a complex plumbing configuration down-gradient of the Pond 17 outlet, the SL-21-PD sample collection location was not representative of the quality and quantity of the discharge from Pond 17.

The plumbing configuration down-gradient of the Pond 17 outlet includes an open vault with a sump pump (see attached Photograph 15), and several pipes (see attached Photographs 14 and 16). The Environmental Manager could not explain what the pipes and sump pump are used for. However, the sump pump had the ability to affect the quantity of the facility's storm water discharges from Pond 17. As a result, the SL-21-PD sample collection location did not meet the requirements specified in Section B.7 of the Permit. The Permittee must identify and collect samples from locations that represent all drainage areas, and the quality and quantity of the facility's storm water discharges.

**VIOLATION: Inadequate and non-representative sampling locations**

**REQUIRED CORRECTIVE ACTIONS:** By May 15, 2010, complete a water balance survey of all existing plumbing and drainage flows at the Facility, and update the engineering plans and documents to depict the current plumbing systems and drainage flows on the Facility property. The water balance survey and documentation must address all water onsite, including storm water, process water, and waste water. Provide a paper and electronic copy of the water balance survey to the Regional Water Board. Based on the results of the above-described survey, revise storm water sampling locations, and update Facility maps and monitoring plan accordingly. Provide a paper and electronic copy of all related documents to the Regional Water Board.

**Lehigh Response:** In fact, the sampling locations, and specifically SL-21-PD, are in compliance with Section B.7. Section B.7 of the General Permit provides:

Facility operators shall visually observe and collect samples of storm water discharges from all drainage areas that represent the quality and quantity of the facility's storm water discharges from the storm event.

Lehigh will add a new point near the creek to be sampled during storm water sampling events. The new location will be labeled SL-S21A-CR. Lehigh also will maintain SL-21-PD as a sampling point, to allow continuity in data collection and evaluation. To clarify the record, what the inspector characterized as "complex plumbing" downgradient of the discharge pipe of Pond 17 does not affect the quality or quantity of Pond 17 discharge. The corrugated pipe of the Pond 17 discharge was utilized as a lay-out conduit for enclosed water lines supplying fresh and makeup water (from Lehigh's Water Reclamation System) to the Rock Plant and take-away water from the lower garage area to the lower lift station; because these pipes are related to the closed water reclamation system (discussed above in response 1), they do not affect storm water collected in and discharged from Pond 17. Thus, the current sampling point SL-21-PD is representative of the storm water discharges from the drainage areas that flow into Pond 17.

The NOV also requests a water balance study and an update of the related engineering plans to be completed by May 15. A water balance study was completed in December 20, 2000. This study has also been referenced in all previous stormwater annual reports submitted to the Regional Board. See, for example, 2008 Annual Report, Appendix E (please let us know if you would like an additional copy of the water balance report). The 2000 Water Balance Study is

current because the water infrastructure at the Permanente facility has not changed since the year 2000.

**3. INSPECTION FINDINGS:** A visible discharge of pollutants sediment and/or other pollutants) into Permanente Creek was observed during inspection, as described below. Adequate BMPs were not implemented to prevent discharge of pollutants from Pond 17 the southeast portion of the site, down-gradient of the Rock Plant.

Pollutants were being actively conveyed the Rock Plant (see attached Photographs 8) to the Pond 17 inlet. Pollutant accumulation was present along the entire inlet portion Pond 17, including evidence of a high event that had caused the inlet check dams breach (see attached Photograph 9).

Moreover, pollutant-laden flow was observed passing over the outlet weir section (see attached Photographs 10 and 11) and through the outlet pipe (see attached Photographs 12 and 13). As specified in Figure 2 of SWPPP 14, the Pond 17 outlet is connected to an outfall to Permanente Creek below Dinky Shed Basin. The Pond 17 outlet flows to a drainage vault (see attached Photographs 14 and 15), which then discharges at the outfall to Permanente Creek. Pollutant-laden flow was observed at the outfall (see attached Photograph 16), and in the Permanente Creek receiving water (see attached Photograph 17 through 19).

As a result, there was an active pollutant-laden discharge during the inspection. Because Pond 17 was not functioning as an adequate BMP for pollutant removal, either the pond must be modified to provide additional filtering and settling of pollutants, or adequate BMPs must be implemented for the pollutant generating sources at the Rock Plant to reduce pollutant conveyance to the pond, and prevent the subsequent discharge of pollutants to Permanente Creek.

**VIOLATION: Observed discharge of pollutants to waters of the state**

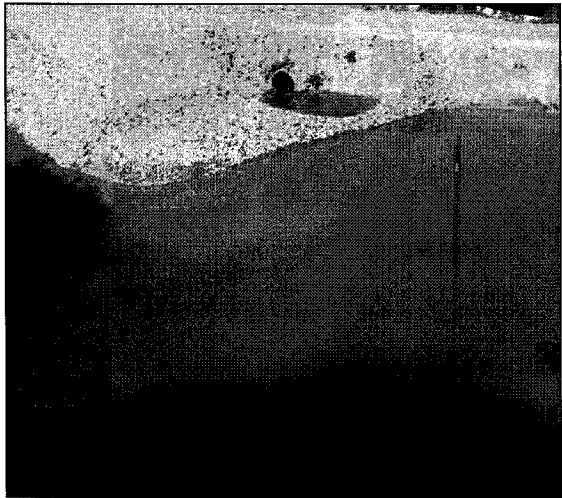
**REQUIRED CORRECTIVE ACTIONS:** By April 15, 2010, select, install, implement, and maintain BMPs to meet BAT and BCT to eliminate discharge of pollutants from Pond 17 into Permanente Creek. In order to come into compliance, you may need to implement temporary BMPs and later come back in and implement more permanent measures. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board.

**Lehigh Response:** One of the storm water BMPs implemented to protect industrial discharges from entering Permanente Creek, as stated and implemented in SWPPP plans (most recent revision SWPPP 15, submitted to the Board on March 3, 2010) involves directing stormwater that contacts the operational facilities to retention ponds. These retention ponds allow for sediment carried via the stormwater streams to be settled out before the water is discharged to the creek. Pond 17, located Southeast of the aggregate facility located at the Permanente site (Rock Plant), is situated such that stormwater that may contact the lower portion of this facility would be directed to this pond for potential sediment control.

Pond 17 was cleaned out in the 2009 dry season, consistent with past practice. The frequency and intensity of the storms in late January/early February 2010 led Pond 17 to be completely filled with sediment just prior to the February inspection. The February 10<sup>th</sup>, 2010 inspection occurred before any pond sediment removal activities could be completed after conditions allowed following the most recent storm. However, these pond sediment removal activities were initiated on February 16<sup>th</sup> and completed on February 19<sup>th</sup>, 2010. As is consistent with all pond sediment

removal activities that occur at this site, a protected wildlife preconstruction survey was conducted prior to any work being started.

Pond 17 was completely cleaned out with the sediment removed and, as a function of stormwater quality, currently produces a very clean discharge. Please see the pictures below, reflecting post-cleanout Pond 17 water quality.



**4. INSPECTION FINDINGS:** The EPA Contract Inspector observed, during the inspection, that the Pond 9 BMP was not adequately inspected and maintained to prevent the discharge of sediment from the upgradient sediment generating sources in Drainage Area D to Permanente Creek. Table 6-1 of SWPPP 14 shows that the contributing area for Pond 9 is Drainage Area D, which includes the Rock Plant Road.

Sediment accumulation was present at the southwestern inlet to Pond 9, and sediment was being actively conveyed from the Rock Plant Road to the southwestern inlet to Pond 9 (see attached Photographs 20 and 21). Sediment-laden water was present in Pond 9, and erosion was observed at the northeastern inlet which lacked flow dissipation BMPs (see attached Photograph 22). As specified in Figure 2 of SWPPP 14, the Pond 9 outlet is connected to an outfall to

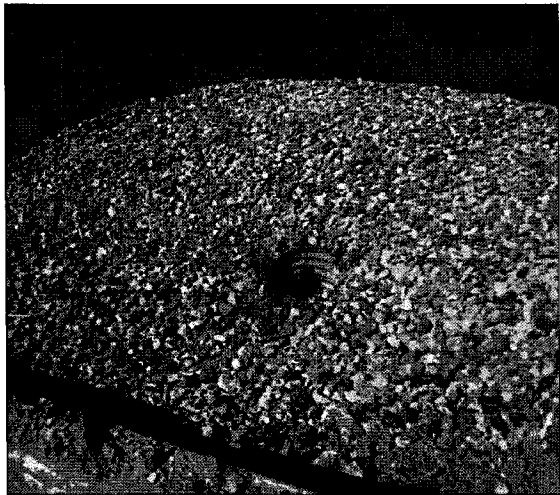
Permanente Creek denoted as the SL-17 PD sample collection location (see attached Photographs 23 and 24).

The Environmental Manager explained that maintenance of Pond 9 had been restricted by regulatory agency actions in the past, but maintenance of Pond 9 was re-instituted in 2007. As a result of the sediment accumulation and sediment-laden water present in Pond 9, there was a potential for the discharge of sediment to Permanente Creek. BMPs must be adequately inspected and maintained to reduce sediment conveyance to the pond from the sediment generating sources in Drainage Area D, and prevent the subsequent discharge of sediment to Permanente Creek.

**VIOLATION: Potential discharge of pollutants to waters of the state**

**REQUIRED CORRECTIVE ACTIONS:** By April 15, 2010, select, install, implement, and maintain BMPs to meet BAT and BCT to eliminate discharge of pollutants from Drainage Area D and Pond 9 into Permanente Creek. Please note that restrictions imposed by regulatory agencies for the dredging of these or other ponds does not prevent the facility from selecting, implementing, and maintaining appropriate and effective BMPs. In order to come into compliance, you may need to implement temporary BMPs and later come back in and implement more permanent measures. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board.

**Lehigh Response:** Pond 9 receives stormwater that come into contact with aggregate customer bulk trucks and plant mobile equipment. The pond is designed to retain this storm water allowing potential sediment to dropout before moving to the discharge standpipe. Additionally, the pond structures a limestone material around the discharge standpipe for further sediment control and water "polishing" prior to discharge. The recent frequency and intensity of the storms in late January / early February 2010 resulted in the inlet of Pond 9, only one of the five roadway inlets, to be filled with sediment. Pond 9 was inspected late in January and, at that time, was holding up well. At the time of the inspection the pond still retained retention capacity to allow for sediment dropout. However, it was noted that the limestone filter material had fallen away during the most recent storms prior to the February 10<sup>th</sup>, 2010 inspection.



Because of contractor scheduling delays and storm events the scheduled Pond 9 clean out will be carried out the week of April 19, 2010.

**5. INSPECTION FINDINGS:** The EPA Contract Inspector observed, during the inspection, that BMPs were not adequately inspected and maintained to prevent the discharge of sediment from a series of sediment traps located along Rock Plant Road. Table 6-1 and Figure 3 of SWPPP 14 shows that this portion of the Rock Plant Road is located in Drainage Area D, which drains to Pond 9.

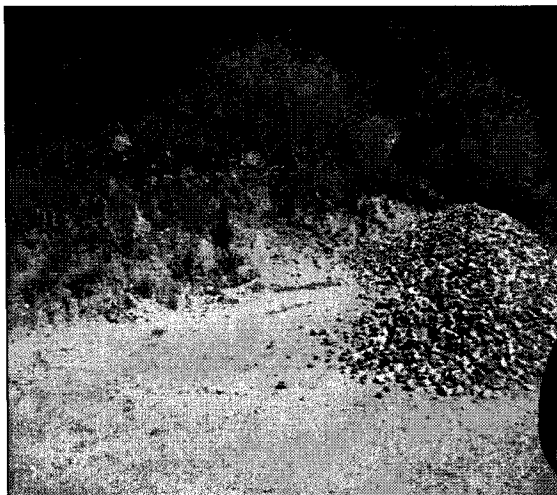
Evidence of slope erosion was observed at an area known as the Rock Pile, including gully formation on the Rock Pile slope (see attached Photograph 26). Sediment accumulation in the sediment trap at the base of the Rock Pile was nearing the capacity of the BMP (see attached Photograph 27). Subsequent down-gradient sediment traps along Rock Plant Road were also nearing capacity due to sediment accumulation (see attached Photographs 28 and 29). Sediment-laden flow was observed bypassing the sediment trap BMPs and flowing down the roadway (see attached Photograph 29), potentially contributing to the sediment loading in Pond 9 (as described in Finding 4, above).

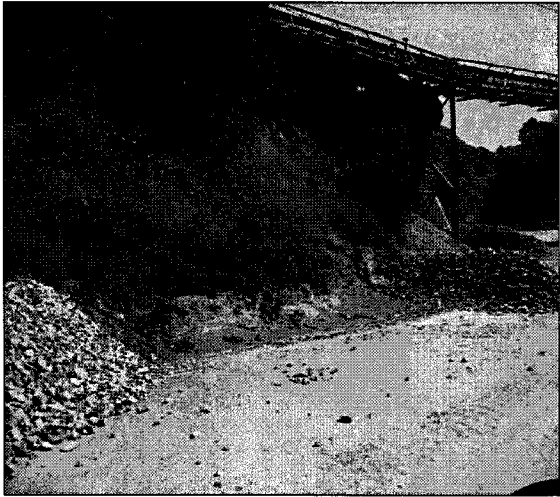
The Environmental Manager indicated that the Permittee does not have a structured schedule for inspection and maintenance of structural BMPs such as Pond 9 and the sediment traps. Because the sediment trap BMPs and Pond 9 had not been adequately inspected and maintained, there was a potential for the discharge of sediment beyond Pond 9 to Permanente Creek. BMPs must be adequately selected, installed, inspected, and maintained to reduce sediment conveyance to the pond from the sediment generating sources in Drainage Area D, and prevent the subsequent discharge of sediment to Permanente Creek.

**VIOLATION: Inadequate source control BMPs; slope erosion**

**REQUIRED CORRECTIVE ACTIONS:** By April 15, 2010, select, install, implement, and maintain BMPs to meet BAT and BCT to provide sufficient source control in Drainage Area D. In order to come into compliance, you may need to implement temporary BMPs and later come back in and implement more permanent measures. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board.

**Lehigh Response:** The unpaved road referenced in the inspector's report, Lower Quarry Plant Road, has a series of catchment bays, or sediment traps, on the inclined portion side on the road.





These “trap” bays have been very successful in capturing sediment-laden stormwater along this area. The inspector noted that the “trap” bays had not been maintained. The fact is that these traps are cleaned out and re-established during the dry season. During the wet season, these bays are cleaned out in between storm events, when water has subsided to the extent that cleanout activities do not subject the area to “mud” drainage and / or spillage. The recent frequency and intensity of the storms in late January / early February 2010 did not allow for cleaning of these bays prior to the February 10, 2010 inspection. However, these bays were cleaned out of material on February 17, 2010, when the weather’s “break in the rain” had allowed for a minimal of mud disturbance. The bays are currently functional. It should be noted that the discharge from these bays go Pond 9 for further clarification / sediment fallout prior to discharge.

**6. INSPECTION FINDINGS:** The EPA Contract Inspector observed, during the inspection, that adequate BMPs were not implemented to prevent the discharge of sediment from a disturbed slope located northwest of Pond 13B. Evidence of slope erosion and concentrated flow was observed northwest of Pond 13B, including gulley formation (see attached Photographs 30 and 31). A shelf at the toe of the slope would prevent flow from entering Pond 13B; instead directing flow events toward Pond 13, an instream sediment control pond (see attached Photographs 30 through 33).

As specified in Figure 2 of SWPPP 14, a drainage conveyance is installed on this slope with the intent of directing flow from the Primary Crusher area to Pond 13A, which is located further northeast of the subject ponds. The gulley formation on the disturbed slope indicates that flow had bypassed the intended route along the drainage conveyance. The Environmental Manager indicated that this drainage conveyance was in need of repairs.

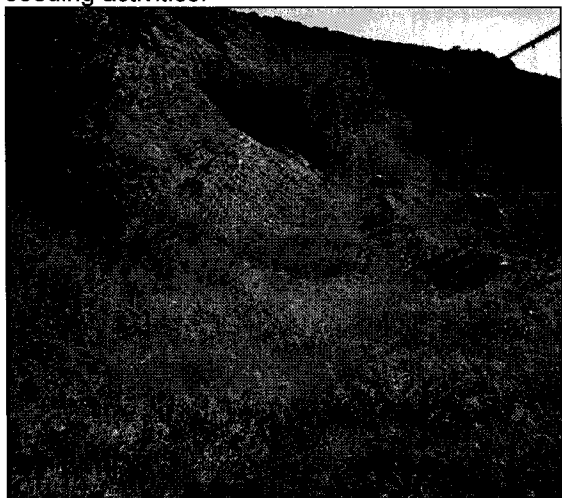
As a result, there was a potential for concentrated flow from the disturbed slope to be conveyed along the shelf at the toe of the slope, and the subsequent discharge of sediment to Permanente Creek at the instream sediment control pond denoted Pond 13 (see attached Photograph 34). Adequate BMPs must be implemented to prevent the discharge of sediment from the disturbed slope to Permanente Creek at the instream sediment control pond denoted Pond 13.



**VIOLATION: Inadequate source control BMPs; slope erosion**

**REQUIRED CORRECTIVE ACTIONS:** By April 15, 2010, select, install, implement, and maintain BMPs to meet BAT and BCT to provide sufficient source control on slope northwest of Pond 13B. In order to come into compliance, you may need to implement temporary BMPs and later come back in and implement more permanent measures. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board.

**Lehigh Response:** The "evidence of slope erosion and concentrated flow" noted by the inspector is in a historic disturbed portion of the hillside northwest of Pond 13b. The rocks show in photograph 31 and 32 of the inspection report are historic and are not indicative of any current erosion activity. Erosion is not indicated after the inspectors picture (Photo 30), and water flow does not carry sediment to pond 13, as would be evidences by non growth establishment and/or sediment channeling and accumulation. Additionally, the hillside above this area recently has been fairly successful in establishing groundcover growth established through repetitive hydro-seeding activities.





The observed corrugated damage above Pond 13b noted by the inspector was based on an occurrence that damaged the existing ½ corrugated channel that was in use in July of 2007. It was also brought to the attention of the inspector that the damaged ½ corrugated culvert had been abandoned after that occurrence; a new section comprised of full and ½ sections was immediately erected and now is used to divert upper quarry road stormwater around the hill-side to pond 13b. To clarify the record, during the inspection, the Environmental Manager did not note to the inspector that the conveyance was in need of repairs.

Lehigh believes that the inspector's/Board's claim in item 6 is incorrect and that additional BMPs and repairs are not needed in this location. Further attempts to work on this steep slope would risk disturbance of the recovering groundcover.

**7. INSPECTION FINDINGS:** The EPA Contract Inspector observed, during the inspection, that adequate Material Handling and Storage BMPs were not implemented to minimize exposure of significant materials to storm water at the vehicle and equipment maintenance shop located in the northeast corner of the Rock Plant (see attached Photograph 35). Automotive lubricants and other chemicals were stored in standing water at the chemical storage area (see attached Photographs 36 through 39).

Standing water has the potential to increase storm water contact with pollutants, particularly during loading and unloading operations. As a result, there was a potential for the contribution of pollutants to storm water. Section A.8.a.iv of the Permit requires Facility operators to consider implementation of material handling and storage BMPs to minimize exposure of significant materials to storm water. Adequate BMPs must be implemented to minimize exposure of pollutants to storm water at the vehicle and equipment maintenance shop located at the Rock Plant.

**VIOLATION: Inadequate Material Handling and Storage BMPs at vehicle and equipment maintenance shop in northeast corner of Rock Plant**

**REQUIRED CORRECTIVE ACTIONS:** By April 15, 2010, select, implement, and maintain adequate material handling and storage BMPs. Identify all non-storm water discharges. Eliminate prohibited non-storm water discharges. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board. Implement BMPs as described in revised SWPPP.

**Lehigh Response:** Based on the recent frequency and intensity of the storms in late January/early February 2010, the "Lower Garage" area located near the southeast corner of the "Rock Plant" was subjected to periodic flooding. It should be noted that the lower garage area is located downhill of the Rock Plant. From this, a water collection "sump" for the lower garage area's equipped pump (was rendered inoperable prior to the February 10, 2010 inspection. A portable pump was/has been used to evacuate the sump, allowing for repairs. The use of the portable pump allowed for proper water discharge from the area and directed all rain water that contacted the lower garage area to the lower lift station, which routes this water to the reclaimed water system.

The pictures denoted by photographs 36 – 39 in the inspection report show a portion of the lower garage area, as noted above. This area's BMP of moving lower area garage rain water and vehicle/equipment wash around stormwater infrastructure has been and is currently functioning correctly. Because this water from the Lower Garage area is routed to the facility's closed reclaimed water system (under Regional Board Order 94-038)—and is not discharged to Permanente Creek-- this item is not part of the SWPPP.

**8. INSPECTION FINDINGS:** The EPA Contract Inspector observed, during the inspection, that adequate Material Handling and Storage BMPs were not implemented to minimize exposure of significant materials to storm water and non-storm water sources at the vehicle and equipment wash bay located in the northeast corner of the Rock Plant. Vehicle and equipment wash water and associated pollutants were actively flowing into an oil skimmer unit located outside the wash bay (see attached Photographs 35 and 41)

In an e-mail dated February 24, 2010, The Environmental Manager stated that "the SOP to keep the area free of oily residue will allow for water to be discharged after inspection for oil sheen or other contaminants...water will be filtered prior to discharge" (see attached Exhibits 1 and 2). However, non-storm water discharges that do not meet the conditions provided in Special Conditions D.1 of the Permit (e.g., vehicle and equipment wash water) are prohibited under Discharge Prohibition A.1 of the Permit. Furthermore, Section A.6.a.v of the Permit requires the investigation and identification of all non-storm water discharges and their sources.

Section 4.4 of SWPPP 14 did not identify the vehicle and equipment wash bay as a potential non-storm water pollutant source. Table 5-2 of SWPPP 14 specifies "do not permit wash water to...runoff onto ground surface...recycle wash water," but this BMP had not been adequately implemented onsite (see attached Photographs 35 and 41). Oily residues were present throughout the area adjacent to the skimmer (see attached Photographs 42 through 44).

As a result of the Permittee's SOP described in an e-mail dated February 24, 2010, there was a potential for wash water and associated pollutants "to be discharged after inspection for oil sheen or other contaminants." The SWPPP must be updated to identify the wash bay as a potential non-storm water pollutant source. Moreover, non-storm water discharges that do not meet the conditions provided in Special Conditions D are prohibited under Section A.6.a.v of the Permit. If the discharge of wash water occurs as indicated in the Permittee's SOP (described in the e-mail dated February 24, 2010), the unauthorized non-storm water discharge must either be eliminated or a separate permit must be obtained.

**VIOLATIONS: Inadequate Material Handling and Storage BMPs at vehicle and equipment wash bay; Discharge of prohibited non-storm water discharges; Failure to identify non-storm water discharges; Failure to implement SWPPP**

**REQUIRED CORRECTIVE ACTIONS: By April 15, 2010, select, implement, and maintain adequate material handling and storage BMPs. Identify all non-storm water discharges. Eliminate prohibited non-storm water discharges. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board. Implement SWPPP as updated per above-stated corrective actions.**

**Lehigh Response:** Based on the recent frequency and intensity of the storms in late January / early February 2010, the "Lower Garage" area located near the southeast corner of the "Rock Plant" was subjected to periodic flooding. It should be noted that the lower garage area is located downhill of the Rock Plant. From this, a water collection "sump" for the lower garage area's equipped pump (was rendered inoperable prior to the February 10, 2010 inspection. A portable pump was / has been used to evacuate the sump, allowing for repairs. The use of the portable pump allowed has allowed for proper water discharge from the area and directed all rain water that contacted the lower garage area to the lower lift station.

Water from the lower garages vehicle / equipment wash area drain to a catchment basin equipped with an oil skimmer. This catchment basin water, after oil skimming treatment, discharges via a sump drainage to the 8PW90 sump, then to the lower lift station. The lower lift station is a part of Lehigh's reclamation water system. Water that goes into Lehigh's Water Reclamation System (Order 94-038) is utilized in internal plant operations and is not discharged to Permanente Creek. Therefore, as discussed above, there were no prohibited non-storm water discharges or failures to identify non-storm water discharges. Because this item is not part of the SWPPP, there was no failure to implement the SWPPP.

The pictures denoted by photographs 35 and 41 are a portion of the lower garage area, as noted above. This area's BMP of moving lower area garage rain water and vehicle / equipment wash around the storm water infrastructure has been and is currently functioning correctly. It should be noted that what was labeled as oily residue in the inspector photographs 42 – 44 is in fact a naturally occurring kerosene found in the sediment throughout the Permanente deposit.

The promulgation of an SOP to handle secondary containment contact water is on-going, but is not pertinent to this item that relates to the lower garage area. The discussion of SOP development was in reference to the Upper Garage area. The inspector apparently misunderstood and applied that discussion to this item.

**9. INSPECTION FINDINGS:** The EPA Contract Inspector observed, during the inspection, that adequate Material Handling and Storage BMPs were not implemented to minimize exposure of cleaning materials to storm water and non-storm water sources at the vehicle and equipment washing area located near the Pearl Harbor lift station in the eastern portion of the cement plant (see attached Photograph 45).

The Environmental Manager indicated that the area is used for washing equipment such as trucks and street sweepers, and the wash water drains to the Pearl Harbor lift station. This drainage connection was not confirmed during the inspection. A drum of acidic descaler was stored in standing water at the vehicle and equipment washing area (see attached Photographs 46 and 47). Standing water has the potential to increase storm water contact with pollutants.

Additionally, a second drum containing acidic descaler residues was stored without the drum bung intact (see attached Photographs 46 and 48). As a result, there was a potential for the contribution of pollutants to storm water. Section A.8.a.iv requires Facility operators to consider implementation of material handling and storage BMPs to minimize exposure of materials to storm water. Adequate BMPs must be implemented to minimize exposure of pollutants to storm water at the vehicle and equipment washing area located in the eastern portion of the cement plant.

**VIOLATION: Inadequate Material Handling and Storage BMPs for containment of cleaning materials at vehicle and equipment washing area near Pearl Harbor Lift Station**

**REQUIRED CORRECTIVE ACTIONS: By April 15, 2010, select, implement, and maintain adequate material handling and storage BMPs. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board.**

**Lehigh Response:** The lower vehicle washing area is a concrete pad that is sloped, to allow wash water to drain to the lower lift station. The descaler, a product used to wash hard water / calcium deposits from the vehicles, was stored in secondary containment. There were two issues 1) the secondary containment was uncovered and had received rainwater from recent storms, and 2) an empty drum of the descaler product was inadvertently left outside of any containment area. On item 1) Lehigh has placed the descaler secondary containment under a covered roof for protection from rainwater. On item 2) the empty drum container was immediately picked up for proper disposal and the supervisor in charge noted that he discussed the issue with the at fault individual.

**10. INSPECTION FINDINGS:** The EPA Contract Inspector observed, during the inspection, that adequate Material Handling and Storage BMPs were not implemented to minimize exposure of significant materials to storm water at the heavy equipment maintenance pad located east of the active quarry pit near the Quarry Office (see attached Photograph 49). In an e-mail dated February 24, 2010, The Environmental Manager stated that "the SOP to keep the area free of oily residue will allow for water to be discharged after inspection for oil sheen or other contaminants...water will be filtered prior to discharge" (see attached Exhibits 1 and 2). However, standing water was present on the concrete maintenance pad and the pad was nearing capacity (see attached Photographs 49 and 55). Standing water has the potential to increase storm water contact with pollutants, particularly after maintenance activities occurring on the concrete pad.

Full drums of petroleum-based automotive lubricants were stored in standing water at the concrete pad (see attached Photographs 50 through 52). In addition, an open waste container used for hazardous wastes (e.g., oil soaked rags, etc.) had accumulated standing water inside (see attached Photographs 53 and 54). As a result of these material storage practices and the standing water near the capacity of the concrete pad (see attached Photographs 49 and 55), there was a potential for the contribution of pollutants to storm water and the subsequent release of pollutants from the concrete pad.

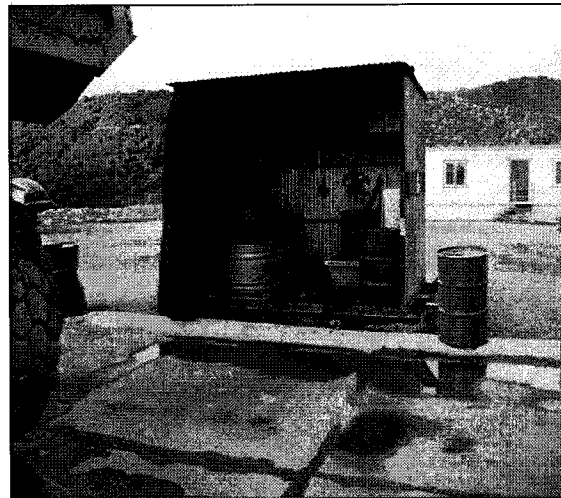
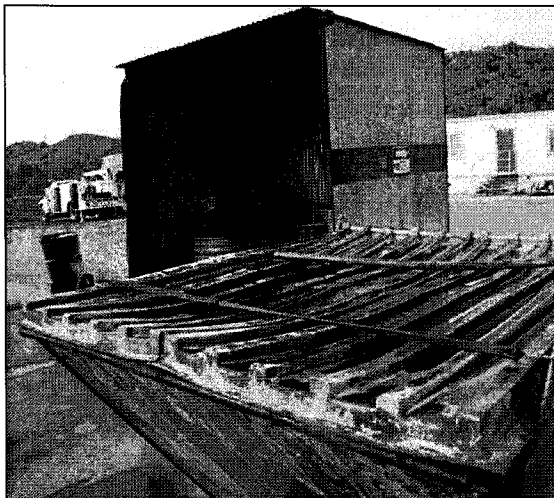
Section A.8.a.ii of the Permit requires Facility operators to consider implementation of preventative maintenance BMPs for regular inspection and maintenance of structural storm water controls (e.g. concrete maintenance pads). Adequate BMPs must be implemented to minimize exposure of pollutants to storm water at the concrete maintenance pad located east of the active quarry pit near the Quarry Office.

**VIOLATION: Inadequate Material Handling and Storage BMPs at heavy equipment maintenance pad east of active quarry pit**

**REQUIRED CORRECTIVE ACTIONS: By April 15, 2010, select, implement, and maintain adequate material handling and storage BMPs. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board.**

**Lehigh Response:** This area noted is the Upper Garage, located by the Quarry Office. The poured concrete pad is equipped with curbed sides to contain rainwater. The area is used for off-road mobile equipped maintenance and repair activities. The size of the equipment maintained makes the utilization of a covered roof unrealistic. The BMP implemented is to immediately contain, isolate and clean up any spilled lubrications or other contaminants that fall within the containment area. Additionally, all maintenance work in the containment area is limited during a storm event.

The petroleum based lubricants have been moved to a covered container stored outside of the noted containment area. The lubricant drums are stored in secondary containment within this container. Additionally, the noted waste container for oily rags has the covers affixed and in the closed position, and has been equipped with bungee cords to maintain cover closure. See photos below; note that the peripheral empty and clean blue barrels are utilized to cover ground level bolts, protecting mobile equipment tires from potential damage.



**11. INSPECTION FINDINGS:** The EPA Contract Inspector observed, during the inspection, that adequate BMPs were not implemented to prevent the discharge of sediment from the unstabilized Upper Quarry Road, roadway shoulder, and associated cut and fill slopes located approximately 0.5 miles southeast of the West Material Storage Area (see attached Photograph 56).

The slope near the intersection of Upper Quarry Road and an access road leading northeast, showed erosion, including gully formation (see attached Photographs 56 and 57), fine sediment accumulation at the toe of the slope (see attached Photograph 58), and slope failure (see attached Photograph 59).

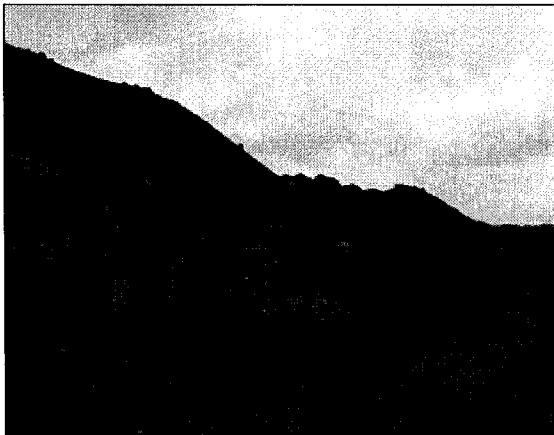
In addition, flow dissipation BMPs had not been implemented in the roadway drainage ditches, and erosive flow was observed running down the surface of Upper Quarry Road without proper grade to direct flows into the drainage ditches (see attached Photographs 60 through 62). As a

result, there was a potential for the discharge of sediment to the active Quarry Pit. Furthermore, the unstabilized Upper Quarry Road, roadway shoulder, and associated cut and fill slopes are a potential source of the elevated total suspended solids results (47,200 mg/L) at the SL-6-RD sample location on January 18, 2010. Adequate BMPs must be implemented to prevent the discharge of sediment from the unstabilized Upper Quarry Road, roadway shoulder, and associated cut and fill slopes to the active Quarry Pit.

**VIOLATION: Incorrectly installed and maintained dirt road and active erosion located approximately 0.5 miles southeast of West Material Storage Area**

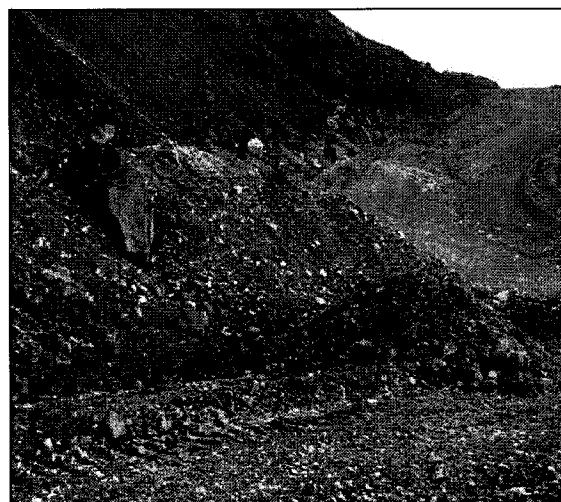
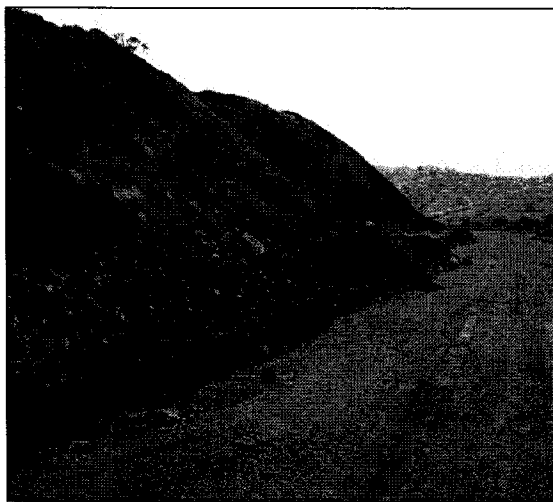
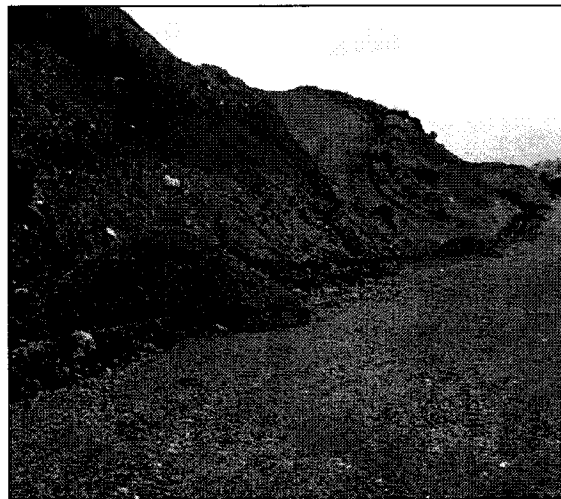
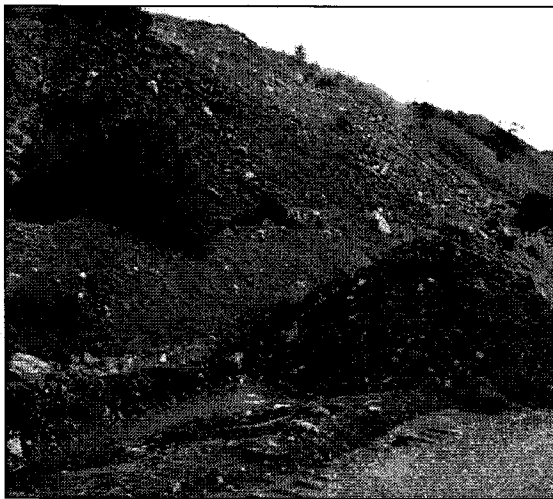
**REQUIRED CORRECTIVE ACTIONS: By April 15, 2010, install erosion control BMPs to protect road and associated cut and fill slopes from erosion. In order to come into compliance, you may need to implement temporary BMPs and later come back in and implement more permanent measures. Revise the Facility's SWPPP to document updates, and submit a paper and electronic copy to the Regional Water Board.**

**Lehigh Response:** The inspector was notified that what he described as the fine sediment accumulation was actually a fine mud material by-product from the washed aggregate system of the "Rock Plant". This mud, which accounts for approximately 15% of the aggregate plant total throughput, is stored in the overburden Material Storage Areas (designated as West (WMSA) and East (EMSA) in Lehigh's SWPPP). When the inspector wanted to look at one of the terraced roads in the WMSA, the truck literally got stuck in the mud. The water content of this mud is such that it forms a cohesive paste product that, even during rain events, does not allow for sediment movement. Erosion noted by the inspector directly above the mud storage area is not a significant source of sediment and is contained within this storage area.



It should be noted that the upper WMSA Road is inner cut (slanted or banked) into the hill side, so water flows via a natural curb on the hill side of the road. All of this water is eventually diverted to the quarry bottom for accumulation, retention and settling. This water is pumped out of the quarry bottom to a secondary retention pond, then to pond 4a for further retention and material settling before discharged to Permanente Creek. The quarry bottom pumping operation is controlled by turbidity meters that cease operation if the turbidity rises above 30 NTU.

The inspector made the recommendation of utilizing sediment bays, or traps similar to those use at the lower quarry road, to help hold potential sediment from being carried via storm event water to the quarry bottom. The sediment sources in the WMSA would be the disturbed areas of the roads and material storage areas. Lehigh has implemented the inspector's recommendation by installing 28 sediment traps along the upper WMSA roadway, and further curbing the road's hill side incline. See photos below:



It should be noted that, even before installation of the additional BMPs, none of the items of concern at the WMSA roads, operations or storm event BMPs had any potential impacts/discharge effects to Permanente Creek because they drain into the quarry retention pond, where settling occurs prior to pumping into Pond 4, where further settling occurs and from there these waters are discharged into Permanente Creek. As described herein, the BMPs are functioning effectively. Accordingly, Lehigh takes issue with the characterization of this the BMPs as a violation resulting from an improperly installed and maintained road. The existing BMPs are protecting Permanente Creek water quality from potential impacts of sediment; nevertheless, as stated Lehigh has added the recommended BMPs as additional measures...

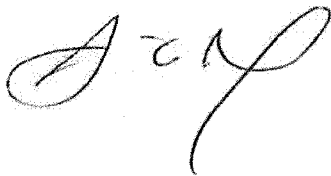


## CONCLUSION

As indicated above, Lehigh Southwest Cement Company – Permanente Plant's SWPPP was updated (SWPPP 15) and submitted to the Regional Board on March 3, 2010. The revised version addressed some of the inspectors initial concerns noted during the February 10, 2010 inspection.

We believe that the revisions to the BMPs and the response to the NOV described herein address the concerns described in your cover letter relating to permit and basin plan violations. However, please let us know if you have any questions or comments on Lehigh's response. We would like to meet and discuss our stormwater management practices with Regional Board staff.

Sincerely,

A handwritten signature in dark ink, appearing to read 'S. Renfrew', written in a cursive style.

Scott Renfrew  
Environmental Manager – Permanente Plant  
Lehigh Southwest Cement Company

Cc: Ms. Shin-Roei Lee  
Ms. Christine Boschen  
Mr. Cecil Felix  
Mr. Stuart Tomlinson  
Mr. Henrik Wesseling  
Mr. Wayne Whitlock